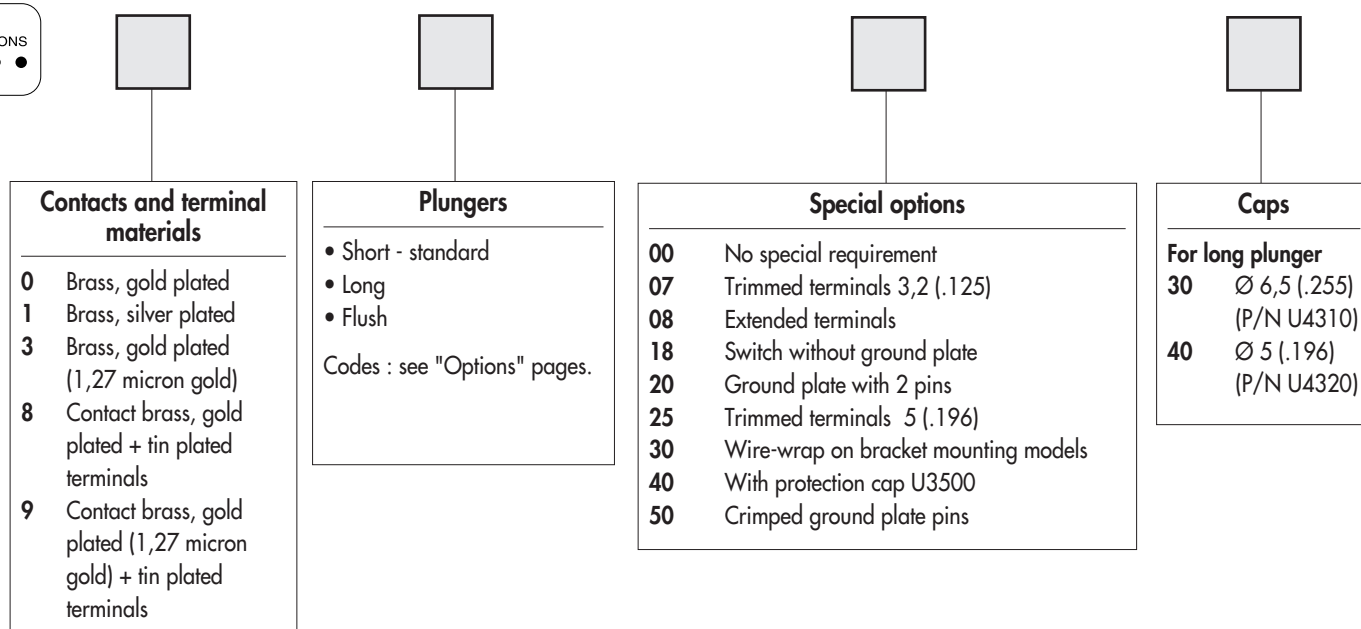
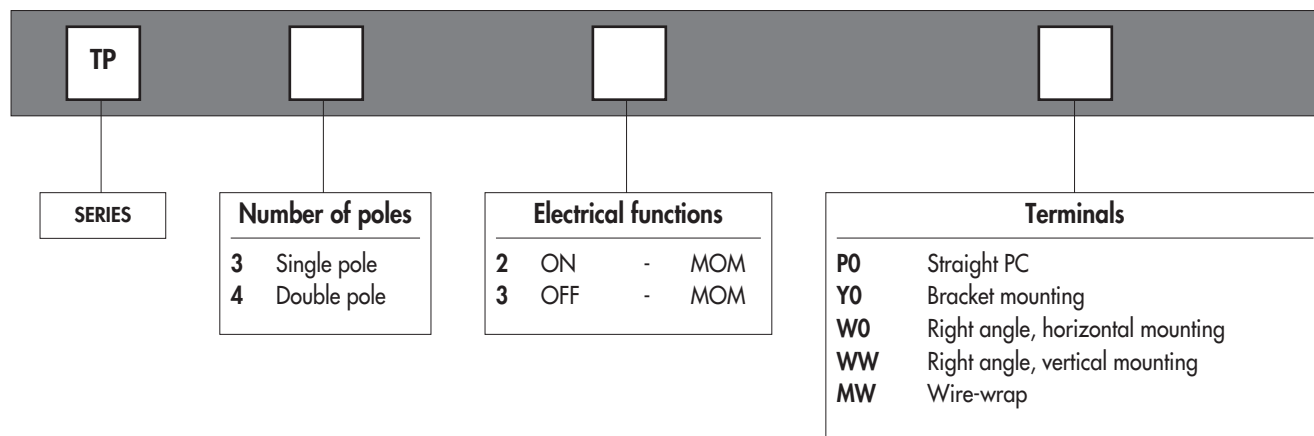


TP SERIES

SUBMINIATURE WASHABLE MOMENTARY PUSHBUTTON SWITCHES

Overview



ABOUT THIS SERIES

On the following pages, you will find successively :

- specifications
- model structure of switches
- options in the same order as in above chart

Dimensions : first dimensions are in mm while inches are shown as bracketted numbers.



NOTICE : please note that not all combinations of above numbers are available. Refer to the following pages for further information.



Packaging unit : 100 pieces, except for models with WW terminals (50 pieces).

TP SERIES

SUBMINIATURE WASHABLE MOMENTARY PUSHBUTTON SWITCHES

Specifications

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
 - gold plated contacts : 0,4VA 20V max. AC or DC
 - silver plated contacts : 0,5A 48V max. AC or DC
- Minimum load : 10mA 50mV - 10 μ A 5VDC
- Contact resistance : 50 m Ω max.
- Insulation resistance : 1.000 M Ω min. at 500VDC
- Dielectric strength :
 - 1.000 Vrms 50 Hz min. between terminals and frame
 - 500 Vrms 50 Hz min. between terminals
- Electrical life at full load :
 - gold plated contacts : 60.000 cycles
 - silver plated contacts : 20.000 cycles

MATERIALS

- Case : PBT
- Actuator : polyamide, glass filled
- Contacts and terminals :
 - 0** : brass, gold plated
 - 1** : brass, silver plated
 - 3** : brass, gold plated (1,27 micron gold)
 - 8** : contact brass, gold plated + tin plated terminals
 - 9** : contact brass, gold plated (1,27 micron gold) + tin plated terminals
- Terminal seal : epoxy

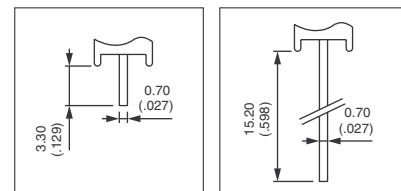
GENERAL SPECIFICATIONS

- Total travel :
 - function 2 : 1 mm (.039)
 - function 3 : 0,8 mm (.031)
- Strength of terminals : pull-out force - 10N max.
- Operating temperature : -30°C to +85°C
- Moisture : 21 days 95 % (NFC 20-603 - IEC 68-2-3)
- Cleaning : solvents or water + detergent
- Wave soldering : 260°C - 5 sec.

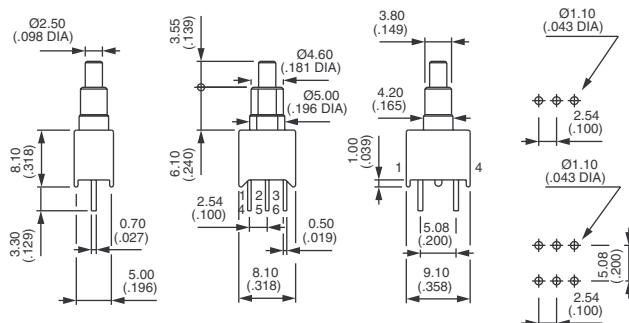
SOLDERING

Compatible wave soldering processes : see specifications S and SF, section B.

A



Straight PC terminals : TP..P0



Function 3 has two terminals only (3 and 1) per pole

Function 3 has two terminals only (3 and 1) per pole

Technical drawing of a 1/2" NPT x 1/2" NPT Tee fitting, showing three views: front, top, and side. Dimensions are in inches and millimeters.

Front View Dimensions:

- Top Port: $\varnothing 2.50$ (.098 DIA)
- Side Port: $\varnothing 4.60$ (.181 DIA)
- Bottom Port: $\varnothing 5.00$ (.196 DIA)
- Top Port Height: 3.55 (.139)
- Side Port Height: 3.80 (.149)
- Bottom Port Height: 3.50 (.137)
- Overall Height: 9.20 (.362)
- Overall Width: 5.55 (.218)

Top View Dimensions:

- Overall Width: 5.55 (.218)
- Overall Depth: 9.60 (.377)
- Top Port Width: 3.30 (.129)
- Side Port Width: 3.30 (.129)
- Bottom Port Width: 3.30 (.129)
- Top Port Height: 0.70 (.027)
- Side Port Height: 0.70 (.027)
- Bottom Port Height: 0.70 (.027)

Side View Dimensions:

- Overall Width: 5.55 (.218)
- Overall Depth: 9.60 (.377)
- Top Port Width: 3.30 (.129)
- Side Port Width: 3.30 (.129)
- Bottom Port Width: 3.30 (.129)
- Top Port Height: 0.70 (.027)
- Side Port Height: 0.70 (.027)
- Bottom Port Height: 0.70 (.027)

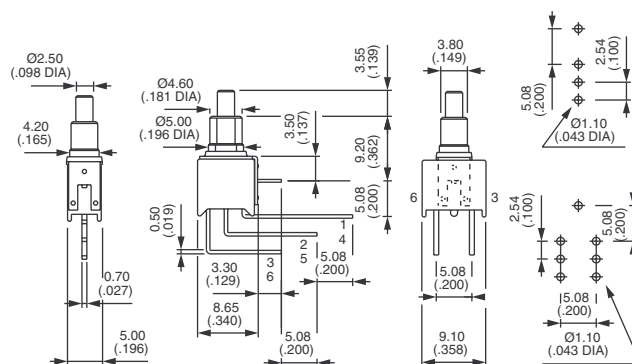
Function 3 has two terminals only (3 and 1) per pole

Shown in function 2, with standard plunger

Right angle terminals - vertical mounting : TP..WW



Single pole	Double pole		
TP32WW	TP42WW	ON	MOM
TP33WW	TP43WW	OFF	MOM

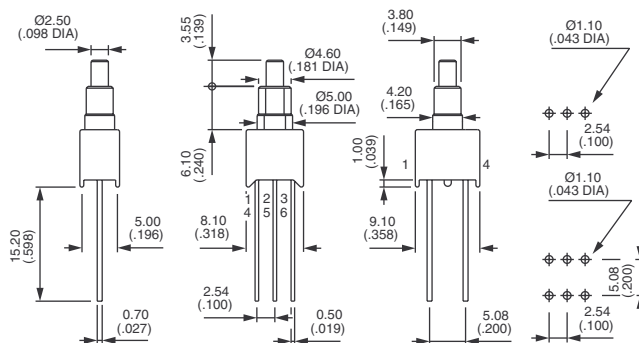


Function 3 has two terminals only (3 and 1) per pole

Wire-wrap terminals : TP..MW

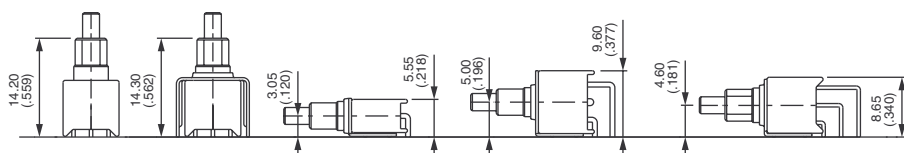


Single pole	Double pole		
TP32MW	TP42MW	ON	MOM
TP33MW	TP43MW	OFF	MOM



Function 3 has two terminals only (3 and 1) per pole

PCB MOUNTING



TP SERIES

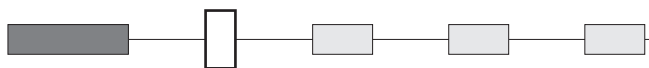
SUBMINIATURE WASHABLE MOMENTARY PUSHBUTTON SWITCHES

OPTIONS



A

CONTACT AND TERMINAL MATERIALS

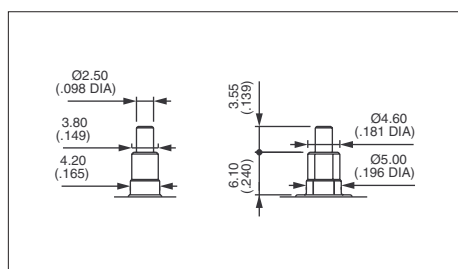


- 0 Brass, gold plated
- 1 Brass, silver plated
- 3 Brass, gold plated (1,27 micron gold)
- 8 Contact brass, gold plated + tin plated terminals
- 9 Contact brass, gold plated (1,27 micron gold) + tin plated terminals

PLUNGERS



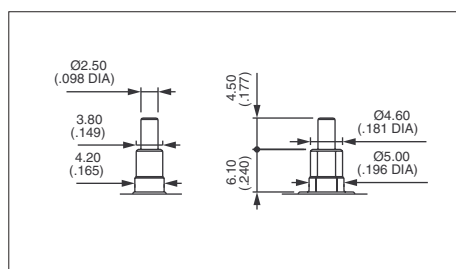
Standard plunger colour is black.



Short - standard

With blue
case
30

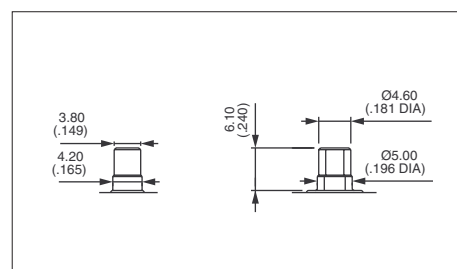
With black
case
80



Long

With blue
case
35

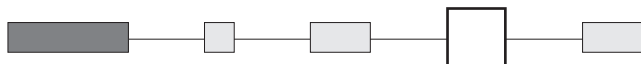
With black
case
85



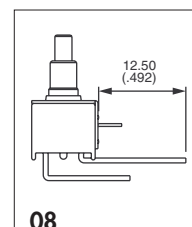
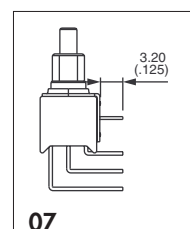
Flush

With black
case
82

SPECIAL OPTIONS



- 00 No special requirement
- 07 **Trimmed terminals** - length 3,2 mm (.125) for TP..WW models only
- 08 **Extended terminals** for TP..W0 models only



TP SERIES

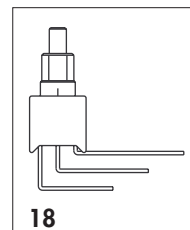
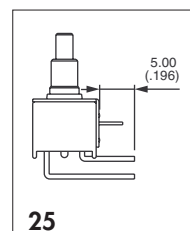
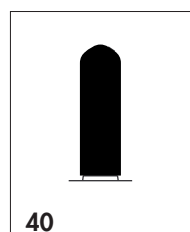
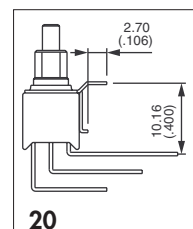
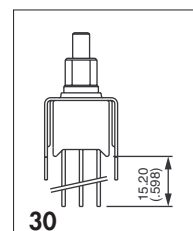
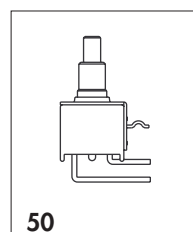
SUBMINIATURE WASHABLE MOMENTARY PUSHBUTTON SWITCHES

OPTIONS

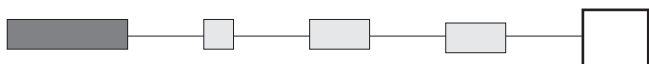


SPECIAL OPTIONS (continued)

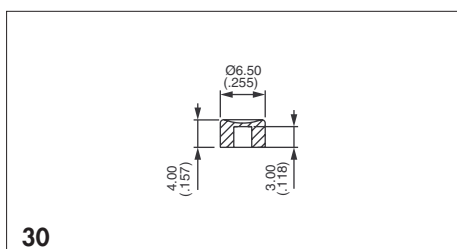
- 18** Switch **without ground plate** for TP..WW models only
- 20** **Ground plate with 2 pins** for TP..WW models only
- 25** **Trimmed terminals** - length 5 mm (.196) for all models, except TP..WW
- 30** **Wire-wrap terminals** on models with mounting **bracket**
- 40** With cap U3500 mounted over plunger and bushing
Further protects the switch during PCB processing
- 50** **Crimping of ground plate pins.**
Retains switch on PC during handling and wave soldering.
For models TP..W0, TP..WW and TP..Y0 single and double pole.

**18****25****40****20****30****50**

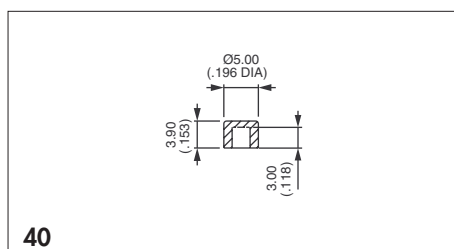
CAPS



Blank Without cap

**30**

P/N U4310 - for long plunger only

**40**

P/N U4320 - for long plunger only

To order caps separately, use their part number (U...).

Cap colours

Replace "0" by number

- | | |
|-----|--------|
| 1 | blue |
| 2 | black |
| 3 | green |
| 4 | grey |
| 5 | yellow |
| 6 | red |
| 7 | ivory |
| 7/1 | white |
| 9 | orange |